

MAR 05 2007

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT**

**Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

REMARKS

The Examiner is respectfully thanked for the consideration provided to this application. Reconsideration of this application is respectfully requested in light of the foregoing amendments and the following remarks.

Each of claims 4, 5, 10, 11, 15-17, 21, 22, 26, 27, 32, 33, 37, 38, 43, and 44 has been amended for at least one reason unrelated to patentability, including at least one of: to explicitly present one or more limitations, phrases, words, terms, and/or elements implicit in the claim as originally written when viewed in light of the specification, thereby not narrowing the scope of the claim; to detect infringement more easily; to enlarge the scope of infringement; to cover different kinds of infringement (direct, indirect, contributory, induced, and/or importation, etc.); to expedite the issuance of a claim of particular current licensing interest; to target the claim to a party currently interested in licensing certain embodiments; to enlarge the royalty base of the claim; to cover a particular product or person in the marketplace; and/or to target the claim to a particular industry.

Claims 1, 3-12, 14-23, 25-34, 36-44 are now pending in this application. Claims 45-56 have been withdrawn. Each of claims 1, 12, 23, and 34 are in independent form.

I. Consideration of Submitted References is Requested

On 11 December 2006, an Information Disclosure Statement and PTO Form 1449 listing and providing 22 references was submitted. It is respectfully requested that those references be expressly considered during the prosecution of this application, that the references be made of record therein, and appear in the "References Cited" section of any patent to issue therefrom. It is respectfully requested that the next communication from the USPTO include a copy of the Form 1449 with the Examiner's initials beside each listed reference.

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

II. The Anticipation Rejections

Each of claims 1, 3-6, 9-12, 14-17, 20-23, 25-28, 31-34, 36-39, and 42-44 was rejected as anticipated under 35 U.S.C. 102(e). In support of the rejection, various portions of U.S. Patent No. 6,732,315 ("Yagil") were applied. These rejections are respectfully traversed.

A. Legal Standards

1. Express Anticipation Rejections

To establish a *prima facie* case of express anticipation, the "invention must have been known to the art in the detail of the claim; that is, all of the elements and limitations of the claim must be shown in a single prior art reference, arranged as in the claim". *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001); *See also*, MPEP 2131. The single reference must describe the claimed subject matter "with sufficient clarity and detail to establish that the subject matter existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention". *Crown Operations Int'l, LTD v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002). Moreover, the prior art reference must be sufficient to enable one with ordinary skill in the art to practice the claimed invention. *In re Borst*, 345 F.2d 851, 855, 145 USPQ 554, 557 (CCPA 1965), *cert. denied*, 382 U.S. 973 (1966); *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354, 65 USPQ2d 1385, 1416 (Fed. Cir. 2003) ("A claimed invention cannot be anticipated by a prior art reference if the allegedly anticipatory disclosures cited as prior art are not enabled.")

The USPTO "has the initial duty of supplying the factual basis for its rejection." *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967).

2. Enablement

"In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method." *Rockwell Int'l Corp. v. U.S.*, 147 F.2d 1358, 47 USPQ2d 1027 (Fed. Cir. 1998); *Motorola, Inc. v. Interdigital Tech. Corp.*, 121

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

F.3d 1461, 1471, 43 USPQ2d 1481, 1489 (Fed. Cir. 1997); *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551, 13 USPQ2d 1301, 1304 (Fed. Cir. 1989); *In re Kumar*, 418 F.2d 1361 (Fed. Cir. 2005).

B. Analysis

1. Claim 1

a. Condensed Argument

As will be explained in detail below, although claim 1 states, *inter alia*, “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”, the applied portions of Yagil neither teach nor enable that limitation, and instead Yagil states that “[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense.”

Independent claim 1 states, *inter alia*, yet the applied portions of Yagil do not teach, “receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the blocking frames are transmitted”.

b. Detailed Argument

Claim 1 states, *inter alia*, “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”. The present Office Action, at Page 3, alleges that this subject matter is taught by Yagil at col. 11, lines 16-22. Yet this applied portion of Yagil allegedly states (emphasis added), “[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense.” Applicant respectfully submits that the alleged teaching of Yagil that an “Inter-Frame Gap (IFG) may be shortened” does not teach “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”. Moreover, this applied portion of Yagil does not enable “each blocking

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”.

Independent claim 1 states, *inter alia*, yet the applied portions of Yagil do not teach, “receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the blocking frames are transmitted”. The present Office Action asserts, at Page 4, that this claimed subject matter is taught by Yagil at col. 10, lines 23-28. Yet this applied portion of Yagil allegedly states:

The operation of the present invention in accordance with a CBR/VBR method is illustrated in FIG. 7. The CBR/VBR method allows latency sensitive applications to transmit without collisions. The CBR/VBR method can be operated in the presence of HomePNA 2.0x stations or interfaces (I/F) 348, shown in FIG. 4. In this method, MAP messages grant time-slots to CBR/VBR transmissions.

Applicant respectfully submits that this applied portion of Yagil does not teach any “reply message” whatsoever, any message from a “non-MC STA”, or “receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the blocking frames are transmitted”.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 1.

2. Claim 3

Since claim 3 depends from claim 1, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 1, *supra*.

In addition, claim 3 states, yet the applied portions of Yagil do not teach “wherein each blocking frame includes a **Blocking Frame Type field**”. The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 60-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

[t]he time-slot grant is done by transmission of grant messages, called “MAP messages” from the network manager 404 to the other stations. The MAP

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT**

**Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a **Blocking Frame Type field**".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 3.

3. Claim 4

Since claim 4 depends from claim 3, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 3, *supra*.

In addition, claim 4 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to

RECEIVED
CENTRAL FAX CENTER

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 4.

4. Claim 5

Since claim 5 depends from claim 3, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 3, *supra*.

In addition, claim 5 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT**

**Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

(CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution."

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "Blocking Frame Type field" and does not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is unknown to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 5.

5. Claim 6

Since claim 6 depends from claim 1 Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 1, *supra*.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 6.

6. Claim 9

Since claim 9 depends from claim 1, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 1, *supra*.

In addition, claim 9 states, yet the applied portions of Yagil do not teach "wherein each blocking frame includes a payload encoding field". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A

**RECEIVED
CENTRAL FAX CENTER****MAR 05 2007****AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT****Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a payload encoding field".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 9.

7. Claim 10

Since claim 10 depends from claim 9, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 9, *supra*.

In addition, claim 10 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "payload encoding field" and does not teach, "wherein each payload encoding field includes information that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 10.

8. Claim 11

Since claim 11 depends from claim 9, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 9, *supra*.

In addition, claim 11 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing

RECEIVED
CENTRAL FAX CENTER

MAR 05 2007 **AMENDMENT UNDER 37 C.F.R. 1.116**
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution.”

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any “payload encoding field” and does not teach, “wherein each payload encoding field includes information that is unknown to the v2 STA”.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 11.

9. Claim 12

a. Condensed Argument

As will be explained in detail below, although claim 12 states, *inter alia*, “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”, the applied portions of Yagil neither teach nor enable that limitation, and instead Yagil states that “[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense.”

Independent claim 12 states, *inter alia*, yet the applied portions of Yagil do not teach, “receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the blocking frames are transmitted”.

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

b. Detailed Argument

Claim 12 states, *inter alia*, "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec". The present Office Action alleges, at Page 3, this subject matter to be taught by Yagil at col. 11, lines 16-22. Yet this applied portion of Yagil allegedly states (emphasis added), "[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense." Applicant respectfully submits that the alleged teaching of Yagil that an "Inter-Frame Gap (IFG) may be shortened" does not teach "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec". Moreover, this applied portion of Yagil does not enable "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec".

Independent claim 12 states, *inter alia*, yet the applied portions of Yagil do not teach, "receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the blocking frames are transmitted". The present Office Action asserts, at Page 4, that this claimed subject matter is taught by Yagil at col. 10, lines 23-28. Yet this applied portion of Yagil allegedly states:

The operation of the present invention in accordance with a CBR/VBR method is illustrated in FIG. 7. The CBR/VBR method allows latency sensitive applications to transmit without collisions. The CBR/VBR method can be operated in the presence of HomePNA 2.0x stations or interfaces (I/F) 348, shown in FIG. 4. In this method, MAP messages grant time-slots to CBR/VBR transmissions.

Applicant respectfully submits that this applied portion of Yagil does not teach any "reply message" whatsoever, any message from a "non-MC STA", or "receiving a reply message to the transmitted message at the MC STA from the selected non-MC STA when the blocking frames are transmitted".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 12.

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT**

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

10. Claim 14

Since claim 14 depends from claim 12, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 12, *supra*.

In addition, claim 14 states, yet the applied portions of Yagil do not teach “wherein each blocking frame includes a **Blocking Frame Type field**”. The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 60-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

[t]he time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of “wherein each blocking frame includes a **Blocking Frame Type field**”.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 14.

11. Claim 15

Since claim 15 depends from claim 14, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 14, *supra*.

In addition, claim 15 states, yet the applied portions of Yagil do not teach “wherein information contained in the **Blocking Frame Type field** identifies a frame type that is known to the v2 STA”. The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

MAR 05 2007

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT****Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 15.

12. Claim 16

Since claim 16 depends from claim 14, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 14, *supra*.

In addition, claim 16 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

RECEIVED
CENTRAL FAX CENTER**MAR 05 2007****AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT****Application # 10/042,143****Attorney Docket # 2000-0672A (1014-200)**

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution."

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "Blocking Frame Type field" and does not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is unknown to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 16.

13. Claim 17

Since claim 17 depends from claim 12 Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 12, *supra*.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 17.

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

14. Claim 20

Since claim 20 depends from claim 12, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 12, *supra*.

In addition, claim 20 states, yet the applied portions of Yagil do not teach "wherein each blocking frame includes a payload encoding field". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a payload encoding field".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 20.

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

15. Claim 21

Since claim 21 depends from claim 20, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 20, *supra*.

In addition, claim 21 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "payload encoding field" and does not teach, "wherein each payload encoding field includes information that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 21.

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

16. Claim 22

Since claim 22 depends from claim 21, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 21, *supra*.

In addition, claim 22 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution."

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "payload encoding field" and does not teach, "wherein each payload encoding field includes information that is unknown to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 22.

RECEIVED
CENTRAL FAX CENTER

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENTApplication # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

17. Claim 23

a. Condensed Argument

As will be explained in detail below, although claim 23 states, *inter alia*, "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec", the applied portions of Yagil neither teach nor enable that limitation, and instead Yagil states that "[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense."

Independent claim 23 states, *inter alia*, yet the applied present Office Action fails to allege that any applied portion of any relied upon reference teaches, "a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA) during the blocking frames, and receiving a reply message in response to the transmitted message from the non-MC STA during the blocking frames".

b. Detailed Argument

Claim 23 states, *inter alia*, "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec". The present Office Action alleges, at Page 3, this subject matter to be taught by Yagil at col. 11, lines 16-22. Yet this applied portion of Yagil allegedly states (emphasis added), "[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense." Applicant respectfully submits that the alleged teaching of Yagil that an "Inter-Frame Gap (IFG) may be shortened" does not teach "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec". Moreover, this applied portion of Yagil does not enable "each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec".

The Office Action appears to improperly group claims together in a common rejection without any showing that the rejection is equally applicable to all claims in the group. That is

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT**

Application # 10/042,143

Attorney Docket # 2000-0672A (1014-200)

never appropriate. See MPEP 707.07(d). For example, independent claim 23 states, *inter alia*, "a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA) **during the blocking frames**, and receiving a reply message in response to the transmitted message from the non-MC STA during the blocking frames". The omnibus rejection of claim groups by the references relied upon in the Office Action makes no mention of "a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA) **during the blocking frames**, and receiving a reply message in response to the transmitted message from the non-MC STA during the blocking frames ", and fails to point out where, in any of the references, that limitation is disclosed. In view of the failure of the Office Action to satisfy the requirements of MPEP 707.07(d), the next Office Action should not be final.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 23.

18. Claim 25

Since claim 25 depends from claim 23, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 23, *supra*.

In addition, claim 25 states, yet the applied portions of Yagil do not teach "wherein each blocking frame includes a **Blocking Frame Type field**". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 60-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

[t]he time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT**

**Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a **Blocking Frame Type field**".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 25.

19. Claim 26

Since claim 26 depends from claim 23, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 23, *supra*.

In addition, claim 26 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

RECEIVED
CENTRAL FAX CENTER

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT

Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 26.

20. Claim 27

Since claim 27 depends from claim 23, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 23, *supra*.

In addition, claim 27 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution."

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "Blocking Frame Type field" and does not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is unknown to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 27.

21. Claim 28

Since claim 28 depends from claim 23 Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 23, *supra*.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 28.

22. Claim 31

Since claim 31 depends from claim 23, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 23, *supra*.

In addition, claim 31 states, yet the applied portions of Yagil do not teach "wherein each blocking frame includes a payload encoding field". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described

MAR 05 2007

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT****Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a payload encoding field".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 31.

23. Claim 32

Since claim 32 depends from claim 31, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 31, *supra*.

In addition, claim 32 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

"MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "payload encoding field" and does not teach, "wherein each payload encoding field includes information that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 32.

24. Claim 33

Since claim 33 depends from claim 31, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 31, *supra*.

In addition, claim 33 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s.

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution.”

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any “payload encoding field” and does not teach, “wherein each payload encoding field includes information that is unknown to the v2 STA”.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 33.

25. Claim 34

a. Condensed Argument

As will be explained in detail below, although claim 34 states, *inter alia*, “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”, the applied portions of Yagil neither teach nor enable that limitation, and instead Yagil states that “[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) may be shortened because the transmission time is determined by the MAP message, not the carrier sense.”

The Office Action appears to improperly group claims together in a common rejection without any showing that the rejection is equally applicable to all claims in the group. That is never appropriate. See MPEP 707.07(d). For example, independent claim 34 states, *inter alia*, “a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA), the transmitted message being transmitted with a highest physical layer priority level available in each HPNA v2 frame and during the blocking frames, the MC STA receiving a reply message in response to the transmitted message from the non-MC STA during the blocking frames”, and fails to point out where, in any of the references, that

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

limitation is disclosed. In view of the failure of the Office Action to satisfy the requirements of MPEP 707.07(d), the next Office Action should not be final.

b. Detailed Argument

Claim 34 states, *inter alia*, “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”. The present Office Action alleges, at Page 3, this subject matter to be taught by Yagil at col. 11, lines 16-22. Yet this applied portion of Yagil allegedly states (emphasis added), “[w]hen a few granted bursts are transmitted consecutively, the Inter-Frame Gap (IFG) **may be shortened** because the transmission time is determined by the MAP message, not the carrier sense.” Applicant respectfully submits that the alleged teaching of Yagil that an “Inter-Frame Gap (IFG) may be shortened” does not teach “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”. Moreover, this applied portion of Yagil does not enable “each blocking frame having timing to allow an Inter-Frame Gap (IFG) having a duration of less than 17 μ sec”.

The Office Action appears to improperly group claims together in a common rejection without any showing that the rejection is equally applicable to all claims in the group. That is never appropriate. See MPEP 707.07(d). For example, independent claim 34 states, *inter alia*, “a Media Control Station (MC STA) transmitting a message to at least one selected non-Media Control Station (non-MC STA), the transmitted message being **transmitted** with a highest physical layer priority level available in each HPNA v2 frame and **during the blocking frames**, the MC STA receiving a reply message in response to the transmitted message from the non-MC STA during the blocking frames”, and fails to point out where, in any of the references, that limitation is disclosed. In view of the failure of the Office Action to satisfy the requirements of MPEP 707.07(d), the next Office Action should not be final.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 34.

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

26. Claim 36

Since claim 36 depends from claim 34, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 34, *supra*.

In addition, claim 36 states, yet the applied portions of Yagil do not teach "wherein each blocking frame includes a **Blocking Frame Type field**". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 60-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

[t]he time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a **Blocking Frame Type field**".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 36.

27. Claim 37

Since claim 37 depends from claim 34, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 34, *supra*.

In addition, claim 37 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 37.

28. Claim 38

Since claim 38 depends from claim 34, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 34, *supra*.

In addition, claim 38 states, yet the applied portions of Yagil do not teach "wherein information contained in the **Blocking Frame Type** field identifies a frame type that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution."

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "Blocking Frame Type field" and does not teach "wherein information contained in the **Blocking Frame Type field** identifies a frame type that is unknown to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 38.

29. Claim 39

Since claim 39 depends from claim 34 Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 34, *supra*.

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 39.

30. Claim 42

Since claim 42 depends from claim 34, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 34, *supra*.

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

In addition, claim 42 states, yet the applied portions of Yagil do not teach "wherein each blocking frame includes a payload encoding field". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of "wherein each blocking frame includes a payload encoding field".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 42.

31. Claim 43

Since claim 43 depends from claim 42, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 42, *supra*.

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

In addition, claim 43 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is known to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 9, line 48-col. 10, line 2. Yet this applied portion of Yagil allegedly states:

This is accomplished by dividing the time axis into "time-slots". A group of time-slots may form a multi-frame. All the stations in the network (except HomePNA 2.0x stations) are synchronized to these time-slots. Each time-slot is numbered and the stations keep track of the numbering with internal counters. The network manager 404 grants time-slots to the HomePN stations 300 of the network 400. A time-slot that is granted to a certain station 300 cannot be used by other stations 300. A special mechanism is used to prevent HomePNA 2.0x stations from interrupting during these time-slots and/or overcome such events, to be described later herein. The time-slot grant is done by transmission of grant messages, called "MAP messages" from the network manager 404 to the other stations. The MAP message includes a table in which each entry is a grant of a range of time-slots to a specific station (unicast) or a group of stations (multicast). The entries may also include more information, such as the addressee, or addressees of the granted time-slots or one or more of the transmission parameters of the granted slots, as examples.

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "payload encoding field" and does not teach, "wherein each payload encoding field includes information that is known to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 43.

32. Claim 44

Since claim 44 depends from claim 42, Applicant respectfully incorporates by reference each traversal regarding the rejection of claim 42, *supra*.

MAR 05 2007

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

In addition, claim 44 states, yet the applied portions of Yagil do not teach "wherein each payload encoding field includes information that is unknown to the v2 STA". The present Office Action alleges, at Page 4, that Yagil teaches this claimed subject matter at col. 11, lines 11-28. Yet this applied portion of Yagil allegedly states:

[a] MAP message may be used to activate and deactivate CBR and VBR streams, to grant time-slots to VBR streams, to grant time-slots to solicited grants (to be described further herein), to grant time-slots to contention based packets and for various control messages.

Each multi-frame preferably begins with a framing time-slot that can include network management and control messages, as well. The timing of the framing time-slot is the reference for the timing of all the time-slots in the multi-frame. Bursts of consecutive CBR streams, VBR streams or solicited messages, to be described further herein, can have shorter IFG than HomePNA2.0x e.g., 1 μ s. The priority slots and EOF can be discarded. During the contention interval, bursts are transmitted in Carrier Sense Multiple Access/ Collision Detection (CSMA/CD), as in HomePNA 2.0x. However, a station must not transmit a burst that spills into the MAP-granted time-slots, or into the next multi-frame, even in the case of collision resolution."

Applicant respectfully submits that this applied portion of Yagil makes no mention whatsoever of any "payload encoding field" and does not teach, "wherein each payload encoding field includes information that is unknown to the v2 STA".

For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 44.

III. The Obviousness Rejections

Each of claims 7, 8, 18, 19, 29, 30, 40, and 41 was rejected under 35 U.S.C. 103(a) as being unpatentable over various combinations of 6,732,315 ("Yagil") and/or U.S. Patent No. 6,954,800 ("Mallory"). Each of these rejections is respectfully traversed.

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

A. Legal Standards

1. *Prima Facie* Criteria for an Obviousness Rejection

Over 40 years ago, in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court established factors regarding the factual inquiry required to establish obviousness. The factors include:

1. determining the scope and contents of the prior art;
2. ascertaining differences between the prior art and the claims at issue;
3. resolving the level of ordinary skill in the pertinent art; and
4. considering objective evidence indicating obviousness or nonobviousness.

The Federal Circuit has applied *Graham*'s required factual inquiry in numerous legal precedents that are binding on the USPTO.

It is recognized that most patentable inventions arise from a combination of old elements and often, each element is found in the prior art. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). However, mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole. *Id.* at 1355, 1357.

Instead, "[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach... all the claim limitations." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP 2143.

Moreover, the "Patent Office has the initial duty of supplying the factual basis for its rejection." *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057, *reh'g denied*, 390 U.S. 1000 (1968). "It may not... resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis". *Id.*

It is legal error to "substitute[] supposed *per se* rules for the particularized inquiry required by section 103. It necessarily produces erroneous results." *See, In re Ochiai*, 71 F.3d

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENTApplication # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

1565, 1571, 37 USPQ2d 1127, 1132-33 (Fed. Cir. 1998); *In re Wright*, 343 F.2d 761, 769-770, 145 USPQ 182, 190 (CCPA 1965).

"Once the examiner... carries the burden of making out a *prima facie* case of unpatentability, 'the burden of coming forward with evidence or argument shifts to the applicant.'" *In re Alton*, 76 F.3d 1168, 37 USPQ2d 1578 (Fed. Cir. 1996) (quoting *In re Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444).

2. Motivation or Suggestion to Combine Prior Art References

Under the *Graham* analysis, the "examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." See, MPEP 2142. The requirements for meeting this burden are clear.

To factually support a *prima facie* conclusion of obviousness, an Office Action must clearly and objectively prove "the reasons one of ordinary skill in the art would have been motivated to select the references". *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998); *In re Johnston*, 435 F.3d 1381 (Fed. Cir. 2006).

Further, "the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed" (emphasis added). *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *In re Sang-Su Lee*, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

To show these reasons, "[p]articular findings must be made". *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Such factual findings must be supported by "concrete evidence in the record". *In re Zurko*, 258 F.3d 1379, 1385-86, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001).

Moreover, a showing of combinability must be "clear and particular". *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 161 (Fed. Cir. 1999). That strong showing is needed because, "obviousness requires proof 'that the skilled artisan . . . would select the elements from the cited prior art references for combination in the manner claimed'". *In re Johnston*, 435

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

F.3d 1381 (Fed. Cir. 2006) (quotation omitted) (emphasis added).

Thus, the Office Action must clearly, particularly, and objectively prove some “suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to”:

“select the references”;

“select the teachings of [the] separate references”; and

“combine [those teachings] in the way that would produce the claimed” subject matter.

In re Johnston, 435 F.3d 1381 (Fed. Cir. 2006) (internal citations omitted). *See also, In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (discussing “the test of whether it would have been obvious to select **specific** teachings and combine them as did the applicant”) (emphasis added); and *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985) (“When prior art references require selective combination... to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself.”). “The absence of . . . a suggestion to combine is dispositive in an obviousness determination.” *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997).

Further, these requirements apply regardless of whether the Office Action relies upon modifying or combining purported teachings.

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious modification of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the **desirability** of the modification.... It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that one cannot use hindsight

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780, 1783-1784 (Fed. Cir. 1992) (citing *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985); and *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) (internal quotations omitted) (emphasis added)).

3. Next Office Action

If an Office Action fails to set forth sufficient facts to provide a *prima facie* basis for the rejections, any future rejection based on the applied reference will necessarily be factually based on an entirely different portion of that reference, and thus will be legally defined as a “new grounds of rejection.” Consequently, any Office Action containing such rejection can not properly be made final. See, *In re Wiechert*, 152 USPQ 247, 251-52 (CCPA 1967) (defining “new ground of rejection” and requiring that “when a rejection is factually based on an entirely different portion of an existing reference the appellant should be afforded an opportunity to make a showing of unobviousness vis-a-vis such portion of the reference”), and *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967) (the USPTO “has the initial duty of supplying the factual basis for its rejection”).

B. Analysis

1. Claim 7

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 7 depends from independent claim 1, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 1. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 7.

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

2. Claim 8

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 8 depends from independent claim 1, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 1. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 8.

3. Claim 18

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 18 depends from independent claim 12, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 12. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 18.

4. Claim 19

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 19 depends from independent claim 12, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 12. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 19.

5. Claim 29

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 29 depends from independent claim 23, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 23. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 29.

**AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)**

6. Claim 30

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 30 depends from independent claim 23, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 23. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 30.

7. Claim 40

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 40 depends from independent claim 34, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 34. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 40.

8. Claim 41

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. Since claim 41 depends from independent claim 34, Applicant incorporates by reference herein each traversal, *supra*, regarding the rejection of claim 34. For at least these reasons, Applicant respectfully requests a reconsideration and withdrawal of the rejection of claim 41.

MAR 05 2007

AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2155
PATENT
Application # 10/042,143
Attorney Docket # 2000-0672A (1014-200)

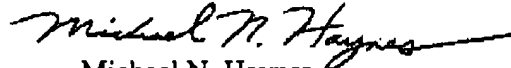
CONCLUSION

It is respectfully submitted that, in view of the foregoing amendments and remarks, the application as amended is in clear condition for allowance. Reconsideration, withdrawal of all grounds of rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. 1.16 or 1.17 to Deposit Account No. 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

Michael Haynes PLC



Michael N. Haynes
Registration No. 40,014

Date: 05 March 2007

1341 Huntersfield Close
Keswick, VA 22947
Telephone: 434-972-9988
Facsimile: 815-550-8850